

China's Oil Rush in Africa



Energy Security

LCDR Cindy Hurst
July 2006

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE JUL 2006		2. REPORT TYPE		3. DATES COVERED 00-07-2006 to 00-07-2006	
4. TITLE AND SUBTITLE China's Oil Rush in Africa				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Army Training and Doctrine Command, Foreign Military Studies Office, Joint Reserve Intelligence Center, Fort Leavenworth, KS, 66027				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES The original document contains color images.					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 22	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

The Institute for the Analysis of Global Security is a Washington based non-profit public educational organization dedicated to research and public debate on issues related to energy security. IAGS seeks to promote public awareness to the strong impact energy has on the world economy and security and to the myriad of technological and policy solutions that could help nations strengthen their energy security.

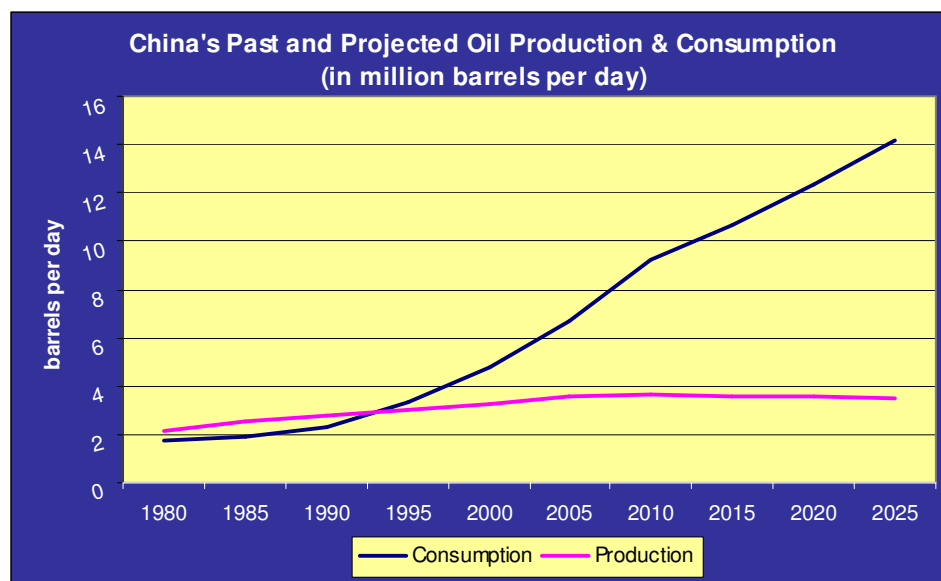
WWW.IAGS.ORG

Cindy Hurst is a political-military research analyst with the Foreign Military Studies Office. She is also a Lieutenant Commander in the United States Navy Reserve.

Background

Ten years ago, the streets of Beijing were filled with bicycles and pedestrians. Today the streets suffer severe automobile gridlock. Although many of the vehicles are small hatchbacks, a growing number of large sports utility vehicles are beginning to emerge in and around Beijing, contributing to China's growing thirst for oil. With over 10 million private cars today, China imported approximately 40 percent of its oil in 2005.¹ By 2020, China is projected to have 120 million private cars and to import at least 60 percent of its oil.²

For four decades since the 1950s, China managed to be self sufficient, meeting all its internal consumer oil needs due to the discovery of massive oil reserves at its major oil reservoir, the Daqing oil fields in the far north of the country. However, with the increase of oil consumption, the Daqing oil fields can no longer be relied upon to fully sustain the country in the years to come. In 2005 China consumed 6.59 million bpd while it only produced 3.75 million bpd.³ Chinese production levels will likely remain steady throughout the next 15 years, but, according to the Energy Information Administration (EIA), China's oil demand will reach 14.2 million bpd by 2025. That same year, net imports are expected to reach 10.9 million bpd. China's oil demand is already a significant factor in world oil markets. Over the past four years, China, the world's second largest oil consumer behind the United States, has been the source of close to 40 percent of the total world oil demand growth over the past four years.⁴ With economic growth running at a rate of roughly nine percent per year China is no longer able to meet its own consumption requirements through its domestic production of oil and it is now being forced to search for oil elsewhere.



Between 1998 and 2003, nearly 60 percent of Chinese crude oil imports came from the Middle East.⁵ However, in light of that region's current instability, China is focusing its efforts today on finding energy resources in other regions around the world, such as the Caspian, Russia, the Americas, the East and South China Sea and Africa. In many cases China is faced with a certain degree of difficulty in acquiring the oil. For example, Russia's pipeline infrastructure is currently lacking, forcing China to use other means to import the oil. In 2005 China reportedly imported an average of 113,726 bpd of Russian oil via railway, an insignificant amount in relation to China's total requirements. Discussions are ongoing between the two countries to build a pipeline, joining the existing Chinese pipeline network at Daqing, which would be capable of transporting as much as 1 million bpd. However, plans have not been finalized, and a pipeline would most likely not be built during the current decade. Oil deals in the Americas are currently underway in places such as Canada and Venezuela. However, each presents a number of challenges in the areas of infrastructure, transportation, environmental and political hurdles.⁶

Africa has become a key oil exporter to China. In 2005 China imported nearly 701,000 bpd of oil from Africa,⁷ approximately 30 percent of its total oil imports. China anticipates increasing that amount to 25 percent in the next ten years and has been carefully paving the way to ensure its objective is met.⁸

China Sets the Stage

China and African countries have maintained diplomatic and economic ties since the 1950's. China developed these primarily as a means to create a diplomatic power-base and a market for its state-owned enterprises. China has given 53 countries in Africa various economic grants, interest-free loans and preferential loans. The underdeveloped nations of Africa, with their weak economies and lacking technology, seem to readily accept Chinese aid and strengthen diplomatic relations with Beijing.

Oil exploration and production is one of the principal areas of foreign investments made by China in Africa. In recent years, China has increased its economic and diplomatic involvement in southern African countries, particularly Angola and South Africa. Although China does not import oil from South Africa, it could benefit from South Africa's technology in the energy sector and the strong refining and gasification infrastructure of Sasol, a South African based global company. This coal-to-liquids technology may be essential to China's future development of coal reserves. Sasol, South Africa's chief producer of oil from

coal, signed a letter of intent with China in August 2004 to investigate the feasibility of establishing two liquefaction plants in China. The first plant could be established in the Ningxia autonomous region and the other in Shaanxi province, costing about \$6 billion. China has approximately 114 billion tons of coal reserves.⁹

China's leadership has already been setting the stage to increase imports of African oil by dramatically increasing diplomatic visits between China and African nations throughout 2004 and beyond. During a February 2004 three-nation tour to Gabon, Egypt and Algeria, all of which have proven oil reserves, Chinese President Hu Jintao vowed to deepen ties on all fronts with the world's poorest continent. During his visit to Algeria, both countries signed several cooperation pacts, including agreements on oil and gas.¹⁰

During the Gabon portion of his three-nation tour, Hu presented a three-point proposal on promoting friendly relations, common prosperity and closer cooperation between China and Africa. While addressing the Gabonese National Assembly, Hu said China and Africa should maintain their traditional friendship and enhance bilateral ties. Hu also said the two sides should adhere to the principle of mutual help and benefit and promote common prosperity. Promising aid to Africa, Hu indicated it would be without any political strings. Hu pointed out that the Chinese and African economies are highly complementary and have a vast potential for cooperation. Finally, Hu added that China and Africa should cooperate more closely in international affairs to safeguard the rights and interests of developing countries, suggesting that economic globalization would benefit everyone and help promote common prosperity.¹¹

China's Oil Companies and Activities Throughout Africa

China's petroleum industry has seen major changes in the past decade. In 1998 the Chinese government reorganized the majority of the state-owned oil and gas assets into two vertically integrated firms, the China Petrochemical Corporation (Sinopec) and the China National Petroleum Corporation (CNPC). Two other major state-sector firms in China include the China National Offshore Oil Corporation (CNOOC), which handles offshore exploration and production and accounts for over 10 percent of China's domestic crude production, and China National Star Petroleum, created in 1997.¹² China's three largest oil companies, CNPC, Sinopec and CNOOC, are said to have boosted spending by at least nine percent in 2004 on oil exploration and production worldwide.¹³

China is busily signing contracts with Nigeria and Angola and is looking at possible projects in other oil-rich African nations such as Niger. Nigeria and Angola already supply China with as much oil as Saudi Arabia.¹⁴ *Table 1* lists those countries in Africa that had either produced oil or had confirmed oil

reserves in December 2005. China has been involved in various oil business deals with a majority of the 19 countries listed. Furthermore, China has either established or been pursuing oil deals with 100 percent of those countries that have at least 0.5 billion barrels of proven reserves.

Country/Region	Oil ¹⁵ (Billion Barrels)
Algeria	11.350
Angola	5.412
Benin	0.008
Cameroon	0.400
Chad	1.500
Congo (Brazzaville)	1.506
Congo (Kinshasa)	0.187
Cote d'Ivoire (IvoryCoast)	0.100
Egypt	3.700
Equatorial Guinea	0.012
Ethiopia	0.0004
Gabon	2.499
Ghana	0.017
Libya	39.126
Morocco	0.001
Nigeria	35.876
South Africa	0.016
Sudan	0.563
Tunisia	0.308
Africa	102.580

Red indicates Chinese involvement

Table 1: Africa Proved Reserves of Oil; Chinese Imports

The information in *Table 1* is indicative of China's increasing activities around oil in Africa. In 2003 China did not import oil from Cote d'Ivoire, Ethiopia or Morocco. However, in 2004 China began to explore and strike up deals with these countries.

Sudan

Perhaps the most controversial of China's oil interests, and one that well demonstrates China's commitment to lock in oil deals in Africa, is its relationship with Sudan. Beijing is the leading developer of oil reserves in Sudan,¹⁶ and currently imports 60 percent of the country's oil output.¹⁷

One of the poorest countries in the world, Sudan has long sought to extract oil riches. For various reasons, including a lack in financial capacity, it was unable to do so on its own. In the 1960s and 1970s, Chevron Corporation took the lead but later abandoned its concessions due to the civil war in the 1980s. In 1996, Arakis Energy Corp., a Canadian firm, began developing the Heglig and Unity fields, which were estimated to contain between 600 million and 1.2 billion barrels. The fields were not located near the Red Sea, which prompted Arakis to enter into a consortium with the Greater Nile Petroleum Operating Company (GNPOC), to raise capital for a nearly 1,000-mile pipeline from the oil fields to the Suakim oil terminal near Port Sudan. In 1998, Arakis sold out to a larger Canadian company, Talisman Energy Inc. Then in early March 2003, Talisman sold its complete 25 percent stake in the Greater Nile Oil Project to ONGC Videsh. This came after a lawsuit, filed in 2001 by the Presbyterian Church of Sudan, which claimed that Talisman aided the Sudanese military in a "brutal ethnic cleansing campaign." Human rights groups had campaigned against the company for years, claiming that the oil revenues paid to the Sudanese government were used to buy arms to fight the civil war, which resulted in the loss of an estimated two million people.

Today CNPC is the largest shareholder in GNPOC. The other shareholders in the consortium are Petronas (Malaysia), Sudapet (Sudan) and ONGC (India). What makes China's involvement in Sudan so controversial, and any company's for that matter are the atrocities taking place within Sudan and China's undying support of the Sudanese government. China is providing diplomatic protection to a government accused by the United Nations of genocide in the western region of Darfur. Various human rights groups have repeatedly accused Sudan of systematically massacring civilians and chasing them off ancestral lands to clear oil-producing areas. For years rebels have attacked oil installations in Sudan, hoping to deprive the government of any means to pursue a civil war that has



claimed so many lives. Yet, today, Chinese laborers are shielded from these attacks, working under the protection of Sudanese government troops armed mostly with Chinese-made weapons.¹⁸

In 2000, Sudanese resistance forces were said to be collecting photographs of Chinese-made weapons to prove the increase in Beijing's support for Khartoum. In July 2000, WorldNetDaily reported that Sudan had acquired 34 new jet fighters from China.¹⁹ In June 2001, the Mideast Newsline reported that Sudan had built three weapons factories with Chinese assistance in order to drive a halt to rebel advances.²⁰ China reportedly provided arms support to Sudan in exchange for oil.²¹

It is difficult to determine exactly how much money China has invested in Sudan. One source states that "China reportedly invested \$20 billion in Sudan, apart from soft loans, grants and other forms of aid."²² According to a study made by PFC Strategic Studies, the Sudanese government could collect as much as \$30 billion or more in total oil revenue by 2012.²³

Today Sudan, the third largest producer of crude oil in sub-Saharan Africa, contains 563 million barrels of conventional proven reserves. This is more than twice the proven 262 million barrels estimated in 2001.²⁴ Approximately 15 companies are operating in Sudan. These companies are mainly from Asia (China, Malaysia and India). For the most part, western companies withdrew due either to pressure from international human rights groups or security concerns, although some representation of western companies still remains. For example, Total (France/Belgium) has a permanent representative in Khartoum, and the company says it will resume its activities when "peace is restored, when intercommunity relations have appeased and when security is effective and sustainable."²⁵

Ethiopia

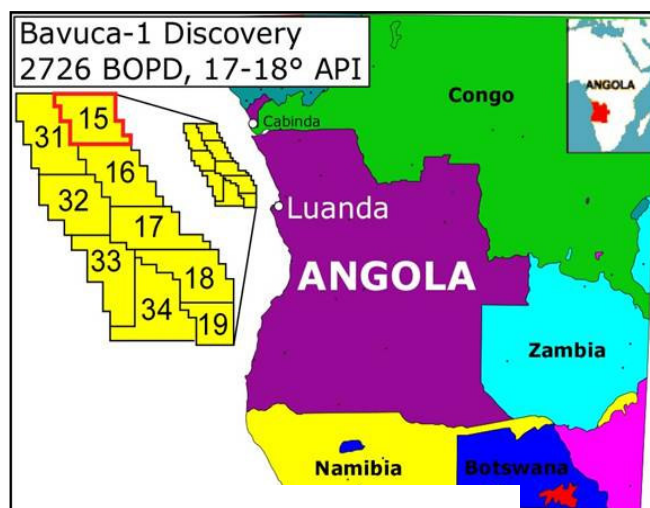
Some experts attribute deplorable human rights violations to the current oil explorations taking place in Gambella, Ethiopia. The Ethiopian People's Revolutionary Defense Forces (EPRDF) has reportedly launched a genocidal war on the Anuaks, the indigenous peoples of the region. Today, Gambella is under total military occupation. An estimated 30,000 to 80,000 troops are deployed to the area, reportedly carrying out genocidal campaigns under the cover of "counter-terrorism."²⁶ China's Ministry of Foreign Affairs has mentioned Zhongyuan Petroleum Prospecting as one of several Chinese companies doing business in Ethiopia.²⁷

On June 13, 2003, Malaysian oil giant Petronas announced the signing of an exclusive 25-year exploration and production sharing agreement with the EPRDF government to exploit the Ogaden Basin, located in eastern Ethiopia, and the

“Gambella Block,” referred to as “Block G,” an area spanning 9,541 square miles. Zhongyuan Petroleum Exploration Bureau, a subsidiary of the China Petrochemical Corporation, appears to be the primary oil firm currently operating in Gambella, under a subcontract with Petronas. Its base camp is located approximately 1 mile from the center of the city, on the Abobo-Gambella road, and is said to be under tight security, heavily guarded by EPRDF troops. In February 2004, even as violence against the Anuak continued to rise, the Ethiopian government held a public meeting in Gambella to announce the launching of the exploration project.

Angola

In the case of Angola, sub-Saharan Africa’s second-largest oil producer, human rights groups criticized the government for years over the mismanagement of oil reserves. In an internal memo leaked in 2002, the International Monetary Fund (IMF) alleged that approximately \$1 billion had disappeared from Angolan coffers the year before.²⁸ This raised plenty of red flags for anyone concerned about transparency. In response to the IMF report, Transparency International renewed its call for oil companies involved in Angola to publish what they pay to the Angolan government. To date, government income remains secret.



Angola has been recovering from a 27-year civil war that began just before the nation won its independence in 1975. The war destroyed much of the country’s economy and infrastructure. The Angolan economy is heavily dependent on its oil sector, which accounts for over 40 percent of Angola’s gross domestic product and nearly 90 percent of government revenues. Throughout the past few years, Angola has experienced sharp increases in oil revenues. Despite these increases, the economy continues to stagger with an external debt of \$9.3 billion and 75 percent of its citizens living in poverty.²⁹

There is great potential for growth in both the oil and gas sectors. The EIA estimates that between 2003 and 2008, foreign direct investment will reach nearly \$23 billion. Sonangol, Angola’s national oil company, works with foreign companies through either joint ventures or production-sharing agreements. Currently the top oil companies working in Angola are ChevronTexaco (US),

ExxonMobil (US), Total (France), the BP (UK), Dutch Shell (UK) and Agip/Eni Oil Company (Italy).

Angola is China's largest trading partner in Africa. Last year, China was busy locking in long-term agreements with Angola for oil. In March 2005, China's Vice Premier Zeng Peiyang, signed nine cooperation agreements with Angola during his visit to the country. Most of these agreements were related to energy. Sonangol agreed on a long-term supply of oil to China's Sinopec. Additionally, Sonangol and Sinopec will evaluate Angola's offshore Block 3. Finally, both countries will jointly study plans for a new oil refinery in Angola.³⁰

In October 2004, as India was preparing to close a deal for about 620 million dollars to buy Shell's 50 percent share in "Block 18," China entered at the last minute to win the major oil deal. In an effort to swing the deal in its favor, China offered \$2 billion in aid for various projects in Angola. India's offer of \$200 million for developing railways paled in comparison.³¹

Nigeria

Although it is the number one oil producer in Africa and the world's eleventh largest oil producer, Nigeria is one of the poorest countries in the world, with over 70 percent of its population living in poverty. Some 80 percent of the government's revenues come from the oil sector.³² As of December 2005, Nigeria's oil reserves are estimated at 35 billion barrels.³³

Producing an average of 2.5 million bpd in 2005, Nigeria plans to increase its oil production to 4 million bpd by 2010. Unfortunately these aspirations do not sit well with OPEC, which places production quotas on its 11 existing members in order to control prices. Nigeria has been frequently exceeding its production quotas, which is not unusual for OPEC countries given the rising cost of oil. The temptations to cash in on these rising prices are great. Multinational oil companies have been pressuring Nigeria to leave OPEC, saying that OPEC membership may hinder Nigeria in its goals of increasing production.³⁴ Nigeria's production is also affected by the growing sectarian violence in the Niger Delta where rebels often sabotage oil infrastructure, abduct oil employees and threaten to drive foreign oil companies away from the region.

The Nigerian government depends heavily on joint-venture operations to fund oil exploration and development. Joint ventures account for approximately 95 percent of the country's crude production. The largest joint venture involves Shell Petroleum Development Company (SPDC) of Nigeria Ltd (30 percent); Nigerian National Petroleum Company (NNPC) (55 percent); Elf Petroleum Nigeria Limited (EPNL) (10 percent); and AGIP (5 percent). Together these

companies produce nearly half of Nigeria's crude oil, with a daily output of approximately 1.1 million barrels.³⁵

ExxonMobil currently produces approximately 570,000 bpd in Nigeria and plans to invest \$11 billion in the country's oil industry between 2003 and 2011 to increase production to 1.2 million bpd. The majority of Nigeria's oil is exported to markets in the U.S. and Western Europe, with Asia becoming increasingly important as well.³⁶

Previously, China had been shut out of Nigeria by Western firms. However, through patience, political prowess, and technological contributions, such as promising to build and launch a communication satellite for Nigeria by 2007, Chinese firms are gaining a foothold in the industry. In December 2004 Sinopec and NNPC signed an agreement to develop Oil Mining Lease (OML) 64 and 66, located in the waters of the Niger Delta in South Nigeria. OML 64 has drilled five exploration wells with one well encountering hydrocarbon resources. OML 66 has drilled 18 exploration wells with 12 encountering hydrocarbon resources.³⁷ In October 2004 Xinhuanet reported that Nigeria would need \$10 billion annually in the next five years to meet its target for oil reserves of 40 billion barrels by 2010 and to eliminate gas flaring by 2008. The Nigerian government signed a memorandum of understanding with China National Offshore Oil Corp. (CNOOC) to identify suitable upstream oil and gas assets that would be integrated into the downstream projects, including refining, power generation, petrochemicals and fertilizer, in partnership with local industry players.³⁸ In July 2005, CNOOC and NNPC signed an \$800 million contract that will guarantee China receives 30,000 bpd for one year. Most recently, and having the most profound impact, was a mutually beneficial deal between China and Nigeria recently signed by President Hu. In exchange for a \$4 billion investment on infrastructure, CNPC was given first refusal rights on four oil blocks. Over the past two years, through continued patience and geopolitical prowess, the pendulum has been swinging in China's direction. Nigeria has reportedly favored Asian investors, who are more willing to offer vitally needed infrastructure developments in exchange for drilling rights. In time, China could easily replace some of these Western firms when drilling licenses come up for renewal.

Algeria

Algeria, another member of OPEC, has suffered from years of civil war and continued unrest. However, it is experiencing a significant economic upturn due to strong oil and natural gas export revenues. Algeria has approximately 11.4 billion barrels of proven reserves. Having recent oil discoveries and plans for more exploration, this amount could rise in the coming years. The country has been producing oil since 1956. However, it is viewed as underdeveloped and is believed to have a vast hydrocarbon potential.³⁹

Approximately 90 percent of Algeria's crude oil is exported to Western Europe, with Italy being the main recipient followed by Germany, then France. European countries rely heavily on Algerian oil due to its quality. It has a much lower sulfur content that allows European countries to meet strict EU regulations on the sulfur content of gasoline and diesel fuel.

Algerian state-owned Sonatrach operates the largest oil field, Hassi Messaoud, which is located in the center of the country. This oil field contains an estimated 6.4 billion barrels, just under 60 percent of the country's proven reserves. Foreign oil operators are steadily increasing their share of oil production. The largest foreign oil producer is Anadarko (US), which produces 530,000 bpd.

Chinese companies have steadily been increasing their presence in the Algerian oil and gas sector. In October 2002, China's Sinopec joined with Sonatrach to invest \$525 million in a project to develop the Zarzaitine oil field in the Sahara Desert. This project is due to be completed in 2008.⁴⁰ In July 2003, CNPC signed a \$350 million contract to import oil from Algeria, and China National Oil and Gas Exploration and Development Co. won a contract to construct an oil refinery near Adrar.⁴¹

In December 2003, CNPC and Sonatrach signed an oil/natural gas contract, where CNPC would invest approximately \$31 million in the following three years to prospect for natural gas and oil in Algeria.⁴² Then, in September 2004, Sonatrach signed eight contracts to prospect for hydrocarbons with seven international companies and consortiums, including China's CNPC. The other countries selected include the U.S., Australia, Spain and Norway. The goal of the contracts is to reach oil discoveries which would allow Sonatrach to produce 2 million bpd and export 85 billion cubic meters of gas by 2010.⁴³

Congo (Brazzaville)

Congo's importance in the world energy markets is increasing with boosted interest in offshore West African oil and the development of new offshore oil fields. After years of civil wars, Congo finally stabilized in 2003. The majority of government revenues come from oil. Congo is another country that has faced transparency issues as a result of the government's misuse of oil revenues. Ultimately, the IMF stepped in to push for transparency and improved public finances. Then, in October 2004, Congo pledged to adhere to the Extractive Industries Transparency Initiative (EITI), a volunteer scheme designed to increase transparency in the oil and mining sectors.

With an estimated 1.5 billion barrels of proven reserves, Congo is heavily reliant on foreign personnel and technology because the majority of the oil is located offshore. Over the past two decades, crude oil production has quadrupled, rising from 65,000 bpd in 1980 to 280,000 bpd in 2000. Although production rates had

declined by 2005 to 227,000 bpd due to maturing fields, 2006 is showing increased production averages to 245,000 bpd due to several new fields coming online.

The leading oil producer and foreign investor in Congo is Elf-Congo, a subsidiary of Total S.A. (France), which currently operates the largest field, N’Kossa, located on the Haute Mer permit. N’Kossa is estimated to have approximately 500 million barrels of recoverable reserves. The second largest producer is Agip (Italy), which produces approximately 25 percent of the Congolese oil output.

Oil is exported via Congo’s main port, Point-Noire, which is in need of expansion. Although the majority of the country’s oil exports are destined for Western Europe (mainly France) and the U.S., the country has been trying to increase its sales to Asian Markets. Trade between China and Congo has been developing quickly since China started importing crude oil directly from Congo in 2001. In 2002 the Chinese signed a deal to buy up to 20,000 bpd of crude oil from Congo per year. In February 2005, China and the Congolese government signed two deals that would authorize Sinopec to explore off-shore blocks designated as Marine XII and High Sea C.

Gabon

Gabon, sub-Saharan Africa’s fifth-largest producer and exporter of crude oil, has been suffering from declining production, which raises concerns about the future of the industry there. Gabon has been experiencing a reasonable degree of stability compared to other African nations, which lends to a higher per capita gross domestic product (GDP) at \$4,414. Unfortunately the GDP is quite unequally distributed, with nearly half of the population living below the poverty line. Currently, oil exports account for approximately 60 percent of the government’s budget and more than 40 percent of the GDP.

If no new oil fields are discovered, it is estimated that production will deplete Gabon’s oil reserves by 2012. Currently, over half of Gabon’s crude oil exports go to the US, while much of the rest goes to Western Europe and occasionally the Far East. In February 2004, Gabon reportedly signed a series of oil deals with China. The purpose of the deals was to “try and breathe new life into” Gabon’s declining economy and its declining oil industry. In return, Gabon has agreed to ship 20,000 barrels of crude per day to China. In the agreements, Sinopec would appear on the scene to explore for oil both onshore and offshore. Sinopec will also look at potentially building a second oil refinery in Gabon. Gabon’s problem is that oil exports have shrunk by one-third over the past six years due to existing reserves being depleted and no major new oil field discoveries.⁴⁴

Sinopec signed a technical evaluation deal with the Gabonese oil ministry for three onshore oilfields. Under this deal, Sinopec will evaluate the potential of the three blocks before actually deciding whether or not to take part in a joint-exploration and production-sharing contract. The first of three blocks, LT2000, is located approximately 120 miles southeast of Port Gentil. The other two blocks, DR200 and GT2000, are approximately 60 miles northeast of Port Gentil. The deal was signed by Hu during his visit to Gabon in early February 2004.⁴⁵

Possible Implications for the US

There are both positive and negative ramifications to China's increasing involvement in Africa. On the positive side, China's engagement in oil production in the region and its investment in high risk countries could add new capacity to the world's tight energy market and hence drive prices down. Furthermore, the revenue and expertise that China brings could be highly beneficial to undeveloped countries in Africa. Without this aid and technology, some of these countries would be unable to realize the financial gain from oil within their boundaries. In today's era of globalization, certain elements are critical to success. Telecommunications is on top of that list, serving as is a vehicle to connect Africa to the rest of the world. China has been at the forefront of offering advanced telecommunication technology to nations critically in need, giving them a geopolitical advantage. On the other hand, China's involvement in some countries could contribute to instability by further enabling these countries to violate human rights and partake in corrupt activities. Last year, Transparency International commissioned Dr. J. Graf Lambdorff, from the University of Passau, to produce a table ranking the perceived levels of corruption throughout the world. The table provided a corruption perceptions index (CPI) score for each country. These CPI scores related to perceptions of the degree of corruption as seen by business people and country analysts. They ranged from 10, indicating highly clean, to 0, indicating highly corrupt. In Africa nine countries have over .5 billion barrels of known oil reserves. None of these nine countries scored higher than a 3.4 CPI score and six of the nine countries scored 2.5 or less.⁴⁶

While the U.S. promotes better business practices in the global business environment, China's policy of not interfering with another country's internal affairs make it an ideal partner to many nations participating in questionable practices. China's growing influence in Africa is therefore counterproductive to western objectives of promoting human rights and abolishing corruption. China's growing involvement in Africa could actually make African governments more corrupt. Much of China's infrastructure aid to Africa comes in the form of advanced credit or loans. This is of concern because dealing with Chinese companies does not come with the same ethical conditions as dealing with Western companies, which have non-governmental organizations monitoring their activities and shareholders asking questions. According to Gal Luft, co-director of the Institute for the analysis of Global Security, the 'Chinese way of

doing business' could reverse the progress on fighting corruption and delivering benefits to African citizens, something that Western companies and organizations, such as the World Bank, the Open Society Institute and Transparency International have been working so hard to achieve.

One such example of how Western businesses have been working to fight corruption is seen in a business venture between Exxon-Mobil in Chad and the World Bank. Under an agreement, profits from oil in Chad don't go directly to the Chad Government but rather to an offshore escrow account. To access the account, the Chad Government needs consent from an independent committee, which must co-sign all checks and do so only if the Government agrees to spend the money on health, education or basic infrastructure. Early this year, however, the government of Chad had a falling out with the World Bank after Chad's government was accused of relaxing controls on the use of its oil profits without first consulting with the World Bank. In retaliation, the World Bank suspended all loans to Chad, which is the most drastic move the bank can take against a member country.

According to Luft, "The Chinese are much more prone to do business in a way that today Europeans and Americans do not accept – paying bribes and all kinds of bonuses under the table. These are things that have been rampant throughout Africa, particularly in Nigeria, Angola and Equatorial Guinea and to a certain extent Chad and Gabon...it will be much easier for those countries to work with Chinese companies rather than American and European companies that are becoming more and more restricted by this 'publish what you pay' initiative and others calling for better transparency."⁴⁷ With such impositions and restrictions placed on oil revenues, an already corrupt government in Africa might be more inclined to accept the Chinese deal that comes with no restrictions.

An approach China takes to ensuring good relations with Africa is that of unconditional support and turning a blind eye to human rights issues. Western governments have often criticized China's track record on human rights. As Africa has also been cited for numerous human rights violations, China tends to show a strong impartiality and understanding. According to the Chinese Prime Minister, Wen Jiabao, one of the main advantages of Africa working with China is that there are no political strings attached. China does not demand a good human-rights and governance track record, as do funding packages from the World Bank and International Monetary Fund.⁴⁸

Some experts say that the overall impact of Chinese companies in Africa remains limited due to their lack of financial power or technology to access the continent's biggest oil fields, which are located offshore. However, this is changing. As China's economy grows, along with its oil industry, so does its financial power. Also, China has recently been joining a number of deepwater ventures. One such example is in the 2004 deal between China and Nigeria to develop some oil fields in the deep waters of the oil-rich Niger Delta. In a more recent project,

Sinopec is participating in a major joint venture that includes Vanco Cote d'Ivoire, ONGC Videsh, and Oil India Ltd. These are said to be leading state-owned companies. The project is located 22 miles off the coast of western Cote d'Ivoire in 5,700 foot water depth.

Ronald Palmer, former Ambassador to Togo and Mauritius and a professor at George Washington University, believes that the U.S. could have a major challenge in meeting its own objectives in future oil development. According to Palmer, development will likely take place in areas now often ruled by "authoritarian and often rapacious regimes including Equatorial Africa, Cameroon, Congo-Brazzaville, Nigeria, Angola, Gabon, Sao Tome and Principe, Namibia, the Central African Republic, Mozambique, Togo and Chad." Should countries in Africa choose to do business with China over the US, it could have an impact on potential future U.S. oil imports. How great an impact it will have remains to be seen. According to Luft, the oil reserves of West Africa, where the U.S. mainly operates, comprise about four percent of global reserves. Therefore, the U.S. should not be overly concerned, at least not yet.

Conclusions

China's exploding economy could potentially result in an economic and socio-economic crisis if China is not able to obtain the resources necessary to support it. Oil is at the forefront of China's requirements list, being integral to a myriad of industrial and consumer needs. China's oil stockpiles are currently very low. According to Greg Priddy, a consultant for the Energy Information Administration, should it somehow lose part of its oil supply, an authoritarian state like China, with parts of it still run as a command economy, would probably have fuel rationing. Fuel would be allocated to essential transportation activities, such as the delivery of food and other necessities, while private citizens would be denied. China is "extremely vulnerable to that. It cannot deal with that for any length of time, probably just a couple of weeks," Priddy said.⁴⁹ Should such rationing occur, it could cause widespread panic leading to rebellion, which could be a dagger in the Chinese government's belly as it loses its edge over the people.

China has been resorting to a number of controversial tactics, such as paying bribes and bonuses under the table in an effort to achieve current success and maintain it in the years to come. In many cases China has come under international scrutiny for its disregard of human rights issues. By publicly announcing its support of nations such as Sudan, Ethiopia and Gambia, China could lose credibility with the United Nations. However, as a permanent member of the U.N. Security Council, China has the ability to control sanctions imposed on various countries. For example, China has been a major stumbling block to U.S. efforts to impose economic sanctions on Sudan due to its veto power.

China is not likely to switch tactics anytime soon as it maintains its philosophy of not interfering with another country's internal affairs. Its method is not to change the internal structure of these countries, but rather to focus on its political, diplomatic and trade relationships for its own economic gain.

A successful tactic China uses for obtaining oil is to acquire equity in foreign oilfields, especially in oilfields of the relatively crisis-ridden countries often shunned by Western oil majors. The advantages to China include:

1. China is able to ensure it has a solid source of oil.
2. Buying equity in oilfields lowers the price of the oil to China in the long run.
3. Competition for oil in certain crisis-ridden countries is reduced by the mere fact that many Westerners either will not pursue oil interests, or they are forbidden from doing so in these countries.

Many countries cannot afford the costly task of conducting their own oil explorations and are willing to enter into a deal with China, giving up a part of the stake in any oil findings, to help boost their economy. China's approach is to develop strategic, long-term bilateral relationships to ensure long-term commitments. China's leadership has been busily working on strengthening diplomatic ties with many countries in Africa. With more and more areas showing geological evidence of possible oil, China is prudently reaching out to nations with proven reserves as well as nations without proven reserves, possibly in anticipation of future oil findings. In recent years China has increased the level and frequency of its official visits to Africa.

China is quick to spotlight historical links to help meet its own modern economic objectives, promoting Beijing as a reliable partner that is not interested in lecturing Africa on sensitive topics such as human rights, governance and corruption. This makes China easier to work with. Western societies find these issues objectionable and are therefore more apt to place certain restrictions on these countries. This plays well into China's strategy of pursuing oil in crisis-ridden countries. By doing this, China is able to reduce competition by Western nations while ensuring a future source of oil.

Currently, the US does not need to be overly concerned. However, it should continue close monitoring of China's activities. It is important that the U.S. develop a better understanding of China's intentions. Due to transparency issues, this has not always been easy in the past. However, China has slowly been making some progress toward transparency through increased media coverage and talks.

Simply put, China is keenly focused on its economic growth. Energy drives that growth. China has been striving to set itself up to ensure its energy sources are not interrupted in the future. Energy security is critical to its growth just as it is critical to sustaining the U.S. economy. However, rather than compete, the U.S.

should strive for more cooperation in areas that can and will have a global impact. Although the two countries are culturally and ideologically different, China and the U.S. share similar concerns. For example, both countries require energy to either sustain or maintain their economies and both countries are affected by global warming. It would be highly advantageous for both countries to focus more on cooperation while maintaining a healthy level of competition.

An ideal area of cooperation should be in renewable energy technologies. Increased renewable sources of energy would decrease the dependency on oil and other fossil fuels, which will one day become scarce. Once China achieves a strong sense of energy security by having alternate energy sources at its disposal, it might be easier to reach an agreement on a resolution to fight corruption in Africa. China perseveres in cooperation with other countries and thus far has achieved great success in reaching its goals. The U.S. can learn from that.

Glossary of Acronyms & Meanings

AGIP: An Italian-owned company.

BPD: Barrels per day.

China National Petroleum Corporation (CNPC): China's largest producer and supplier of crude oil and natural gas. A state-owned company.

Greater Nile Petroleum Operating Company (GNPOC): A consortium that dominates Sudan's oil fields.

IMF: International Monetary Fund.

Nigerian National Petroleum Company (NNPC): State-owned Nigerian oil company.

Organization of the Petroleum Exporting Countries (OPEC): A permanent, intergovernmental organization created at the Baghdad Conference on September 10-14, 1960, by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. These countries were later joined by Qatar (1961), Indonesia (1962), Libya (1962), United Arab Emirates (1967), Algeria (1969), Nigeria (1971), Ecuador (1973-1992) and Gabon (1975-1994).

Proven reserves: Reserves that, to a high degree of certainty (90 percent), are recoverable.

Shell Petroleum Development Company of Nigeria (SPDC): Produces 43 percent of Nigeria's oil. It's operations are concentrated in the Niger Delta and adjoining shallow offshore areas where it operates in an oil mining lease area of approximately 19,300 square miles. SPDC has more than 3,700 miles of pipelines and flow lines.

Sinopec: (also known as China Petroleum & Chemical Corporation) is one of China largest integrated energy and chemical companies.

NOTES

- ¹ Kazakhstan Oil Pours Into China Through Crossborder Pipeline," *Xinhuanet*, 25 May 2006 <http://news.xinhuanet.com/english/2006-05/25/content_4600061.htm> (14 Jun 2006).
- ² According to projections put out by the Energy Information Administration, that percentage would be closer to 75%, with only 3.5 million bpd being produced, while demand is supposed to reach 14.2. Rupert Wingfield-Hayes, "China's Thirst for Oil Gets into Top Gear," *Alexander's Gas & Oil Connections*, volume 9, issue # 20, 14 Oct 2004, BBC News, 1 October 2004, <http://www.gasandoil.com/goc/news/h_nts_left.htm> (7 Dec 2004) and "Jane's Sentinel Security Assessment," 12 January 2005.
- ³ "China Increases Security of Supply with Energy Deals in Nigeria and Kenya," *Global Insight*, May 2006, <<http://www.globalinsight.com/SDA/SDADetail5726.htm>> (15 Jun 2006) and *Energy Information Administration*, <<http://www.eia.doe.gov>> (15 Jun 2006).
- ⁴ "China," *Energy Information Administration*, July 2004, <<http://www.eia.doe.gov>> (1 Feb 2006).
- ⁵ "Jane's Sentinel Security Assessment," 12 January 2005.
- ⁶ "China," *Energy Information Administration*, August 2005, <<http://www.eia.doe.gov>> (14 Jun 2006).
- ⁷ "China Increases Security of Supply with Energy Deals in Nigeria and Kenya," *Global Insight*.
- ⁸ "Beijing Wants More African Oil," *Asia News Agencies*.
- ⁹ BP Statistical Review, 2005.
- ¹⁰ FP World economic News Summary for Wednesday, February 4," *Agence France Press*, 4 February 2004, <<http://www.lexisnexis.com>> (16 July 2004).
- ¹¹ "Chinese Leader in Gabon: Proposes Initiative to Boost Relations with Africa," *BBC Monitoring International Reports*, 2 February 2004, <<http://www.lexisnexis.com>> (16 July 2004).
- ¹² "China," *Energy Information Administration*, July 2004, <<http://www.eia.doe.gov>> (15 Dec 2004).
- ¹³ "China Needs \$75 bn a Year to Boost Energy Output," *Bloomberg*, 1 October 2004, *Alexander's Gas & Oil Connections*, volume 9, issue #20, 14 October 2004, <http://www.gasandoil.com/goc/news/h_nts_left.htm> (7 Dec 2004).
- ¹⁴ Andrew Quinn, "Resource Hungry China Makes African Push," *Reuters [UK]*, 22 November 2004, <<http://reuters.co.uk>> (25 Nov 2004).
- ¹⁵ PennWell Corporation, *Oil & Gas Journal*, Vol. 103, No. 47, 19 December 2005.
- ¹⁶ "China Concludes Oil, Gas Agreement with Algeria," *World Tribune*, 9 February 2004, <http://216.26.163.62/2004/ea_china_02_08.html> (9 Dec 2004).
- ¹⁷ Jane's Sentinel Security Assessment.

-
- ¹⁸ Peter S. Goodman, "China Invests Heavily in Sudan's Oil Industry," *Washington Post*, 23 December 2004.
- ¹⁹ Charles Smith, "Sudan War Heating Up: Clinton Ignores African Atrocities as China Escalates Aid to Khartoum," *WorldNetDaily.com*, 29 Aug 2000, <<http://www.freerepublic.com/forum/a39ab60dc37b9.htm>> (23 Mar 2005).
- ²⁰ "Sudan Builds New Weapons Factories with Chinese Help," *Mideast Newsline*, 17 June 2001, <<http://www.freerepublic.com/forum/a3b2cc46d1f1c.htm>> (23 Mar 2001).
- ²¹ Charles Smith, "Sudan War Heating Up: Clinton Ignores African Atrocities as China Escalates Aid to Khartoum."
- ²² Happymon Jacob, "India-Sudan Energy Ties: Implications," *Observer Research Foundation [India]*, 31 August 2004, <<http://www.observerindia.com/analysis/A031.htm>> (24 May 2005).
- ²³ Peter S. Goodman, "China Invests Heavily in Sudan's Oil Industry."
- ²⁴ "Sudan," Energy Information Administration, March 2006, <<http://www.eia.doe.gov>> (15 Jun 2006).
- ²⁵ "Questions – Answers," *Total website*, 28 September 2005, <<http://www.total.com>>.
- ²⁶ Keith Harmon Snow, "Ethnic Cleansing in Ethiopia Tip of the 'Golden Spear'?" *Global Policy Forum*, 4 November 2004, <<http://www.globalpolicy.org>> (9 Dec 2004).
- ²⁷ "Bilateral Relations," *Ministry of Foreign Affairs of the People's Republic of China*, 12 October 2003, <<http://www.fmprc.gov.cn>> (9 Dec 2004).
- ²⁸ "China-Argentina Oil Investment Deal Gives Angola Key Role," *Morning Star*, 22 November 2004, <<http://new.morningstar.com>> (9 Dec 2004).
- ²⁹ "Angola: Country Analysis Briefs," *Energy Information Administration*, December 2004.
- ³⁰ "China, Angola Sign 9 Cooperation Agreements," *Afrol News*, 7 March 2005, <<http://www.afrol.com>>.
- ³¹ "China Beats India for Angola Oil Deal," *CRI Online*, 19 October 2004, <<http://en.chinabroadcast.cn>> (9 Dec 2004).
- ³² "Nigeria," *Energy Information Administration, Country Analysis Briefs*, April 2005, <<http://www.eia.doe.gov>>.
- ³³ PennWell Corporation, *Oil & Gas Journal*
- ³⁴ "Nigeria," *Energy Information Administration, Country Analysis Briefs*.
- ³⁵ Ibid.
- ³⁶ Ibid.
- ³⁷ "China, Nigeria Sign Oil Development Agreement," *China Daily*, 19 December 2004, <<http://www.chinadaily.com/cn>> (21 Dec 2004).

³⁸ "Nigeria Needs \$10 B Investment Annually for O&G Industry," *Xinhua News Agency*, 11 October 2004, <<http://www.rigzone.com>> (29 Dec 2004).

³⁹ "Algeria," *Energy Information Administration, Country Analysis Briefs*, March 2005, <<http://www.eia.doe.gov>>.

⁴⁰ "China, Algeria Firm Up Oil Ties," *International Oil Daily*, 3 February 2004, LexisNexis, University of Arizona, 5 April 2004.

⁴¹ "China Concludes Oil, Gas Agreement with Algeria," *World Tribune*.

⁴² "China, Algeria Sign Oil, National Gas Contract," *China Daily*, 23 December 2003, <<http://www2.chinadaily.com.cn>> (9 Nov 2004).

⁴³ "Sonatrach Signs Eight Contracts to Prospect for Hydrocarbons in Algeria," *BBC Monitoring International Reports*, 27 September 2004, LexisNexis, University of Arizona, 27 September 2004

⁴⁴ "Gabon: Oil Pact with China Aims to Boost Falling Reserves," *IRIN News*, 5 February 2004 <<http://www.irinnews.org>> (26 Nov 2004).

⁴⁵ "Sinopec to Evaluate Three Exploration Blocks onshore Gabon," *AFP*, 3 Feb 2004, <<http://www.rigzone.com>> (29 Dec 2004).

⁴⁶ CPI scores can vary depending on a confidence range provided and surveys used to assess each country's performance. As CPI scores decreased, so too did the reliability factor. Surveys taken tended to vary in number. "Global/World Corruption Report 2006," Finfacts Ireland, 2006, <<http://www.finfacts.com/corruption.htm>> (20 Jun 2006).

⁴⁷ "China, Algeria Sign Oil, National Gas Contract," *China Daily*, 23 December 2003, <<http://www2.chinadaily.com.cn>> (9 Nov 2004).

⁴⁸ Aymeric Vincenot, "China's Hu to Visit Three African States to Bolster Partnerships," *Agence France Press*, 27 January, <<http://www.lexisnexis.com>>, (16 July 2004).

⁴⁹ Greg Priddy, telephone interview, 25 March 2005.